Understanding the Impact of Poor Quality on the Bottom Line
TYPES OF QUALITY COSTS: AN INTRODUCTION
At the end of this part of the program you will be able to:

• Identify the types of quality costs that impact a laboratory’s budget

• Distinguish between internal and external failure costs
Federal cuts to laboratory reimbursements have hit laboratories hard.

Private payors are also decreasing reimbursements.

Hospitals are more competitive.

Subsequently, hospital and laboratory administrators closely scrutinize budgets for all opportunities to reduce costs.
However...

“Companies rarely have a realistic idea of how much profit they are losing through poor quality.”

“Companies that adopt a cost of quality concept are successful in reducing failure cost and improving quality for customers.”

**Laboratories are businesses; therefore, these situations are no different for laboratories—or for all of health care!**
Polling Question

• Before today have you heard or read anything about *laboratory quality costs*?

• Yes

• No
• Learn about quality costs.

• Identify quality cost types on your laboratory’s budget.

• Gather data to defend protecting all the costs that support good quality.
Quality Costs Include Those For:

- Preventing problems in laboratory services.
- Measuring, controlling, and/or inspecting quality levels.
- *Failing to accomplish desired quality levels.*
- Any cost that is expended when quality is less than what is needed.
Types of Quality Costs

- Prevention
- Appraisal
- Failure
  - Internal
  - External
It’s cheaper to do the job right the first time than to recover from an error.

Philip Crosby
1926-2001
Prevention Costs

- For laboratory activities specifically designed to prevent poor quality in laboratory services.

- For activities that prevent problems, errors, or waste from occurring.

- Not costs incurred to keep a problem or error from recurring!
Examples of Laboratory Prevention Costs

• **Preventive Maintenance**
  Maintaining your lab’s instruments and equipment according to the manufacturer’s schedule ensures reliable performance.

• **Quality Planning**
  As the old Army saying goes, “Prior planning prevents poor performance!”

• **Work Process Training**
  An effective new employee training program can prevent downstream errors.

• **Initial Competency Assessment**
  Ensures new/changed work is performed competently.

• **Quality Improvement Projects**
  Time spent in quality education, meetings, and projects is labor well spent.
Appraisal Costs

• For evaluating quality of work after it has been performed.

• For measuring, evaluating, and auditing to ensure conformance to requirements.

• To “catch and correct” problems and errors before harm to laboratory users and patients.
Examples of Laboratory Appraisal Costs

• **Ongoing Competence Assessment**
  Ensures staff maintains competence.

• **Calibration**
  Ensures accuracy of measuring equipment.

• **Inspections of Samples and Reagents**
  Ensures quality of inputs to testing methods.

• **Quality Control**
  Ensures that testing methods are working and results are valid.

• **Proficiency Testing**
  Ensures method performance compares to peers.

• **External Accreditations**
  Ensures lab performance to minimum standards.
Failure Costs

• Services that do not meet quality requirements the first time usually need rework or correction.

• Internal failure costs
  – Caught and corrected inside the laboratory before delivery of results or reports.

• External failure costs
  – Detected outside the laboratory by users who receive faulty results, reports, or other services.
Every time work is redone, the cost of quality increases!
Examples of Laboratory Internal Failure Costs

• **Sample Problems**
  Received samples do not meet acceptance criteria and need recollection.

• **Invalid Instrument Runs**
  QC or calibration is out of control and results cannot be released.

• **Expired Reagents or Materials**
  Are not to be used in phlebotomy or testing.

• **Anything That Causes Delays in Turnaround Time**
  – Rework
  – Retesting
  – Repair
  – Downtime
Examples of Laboratory External Failure Costs

• **Customer Complaints**
  Dissatisfaction reported by any laboratory customer, user, client, or patient.

• **Report Recalls**
  Erroneous results are corrected with resulting consequences.

• **Misdiagnoses**
  The cost of not receiving needed treatment and the cost of receiving treatment erroneously—not including patient distress.

• **Lawsuits**
  Uncommon, but very costly for whatever reason.
Comparative Cost of Quality

Prevention
- Defect prevention efforts: $1

Appraisal
- Inspection and testing to catch and correct defects: $10

Failure
- Customer finds defects or is dissatisfied with services: $100
The Cost of Quality

Most labs are here:

Where labs should be:

Failure cost

Total Quality cost

Prevention and Appraisal cost
What is the cost of quality in YOUR laboratory?